

# 5G - INTRO

- Tana Petersen, Vernon Resident
- Member of SENS
- Grandmother
- Concerned Citizen

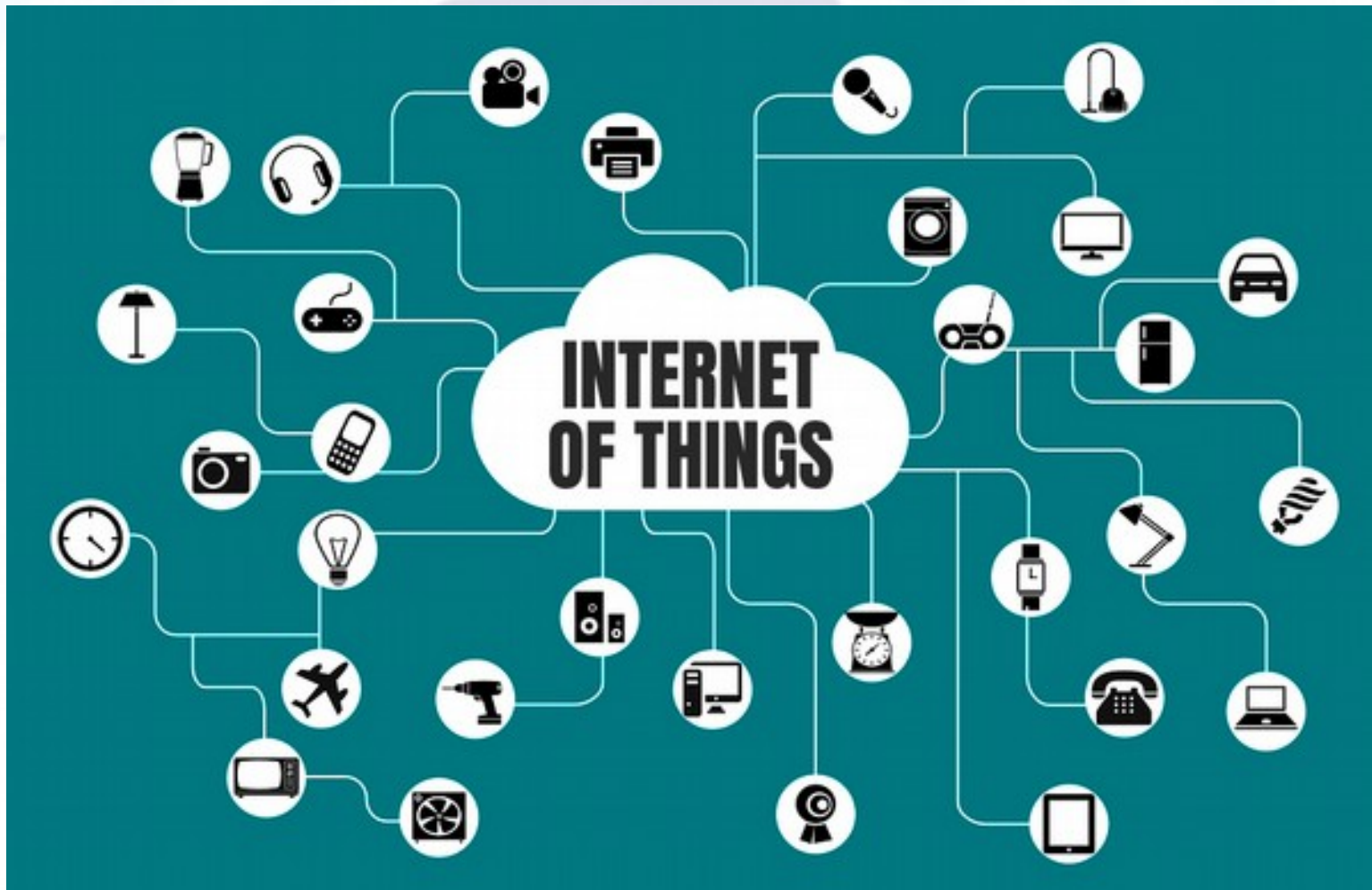
# 5G - Presentation

- What is 5G?
- What are the concerns?
- Who else is concerned?
- What we're asking Vernon to do.

# 5G – Terms of Reference

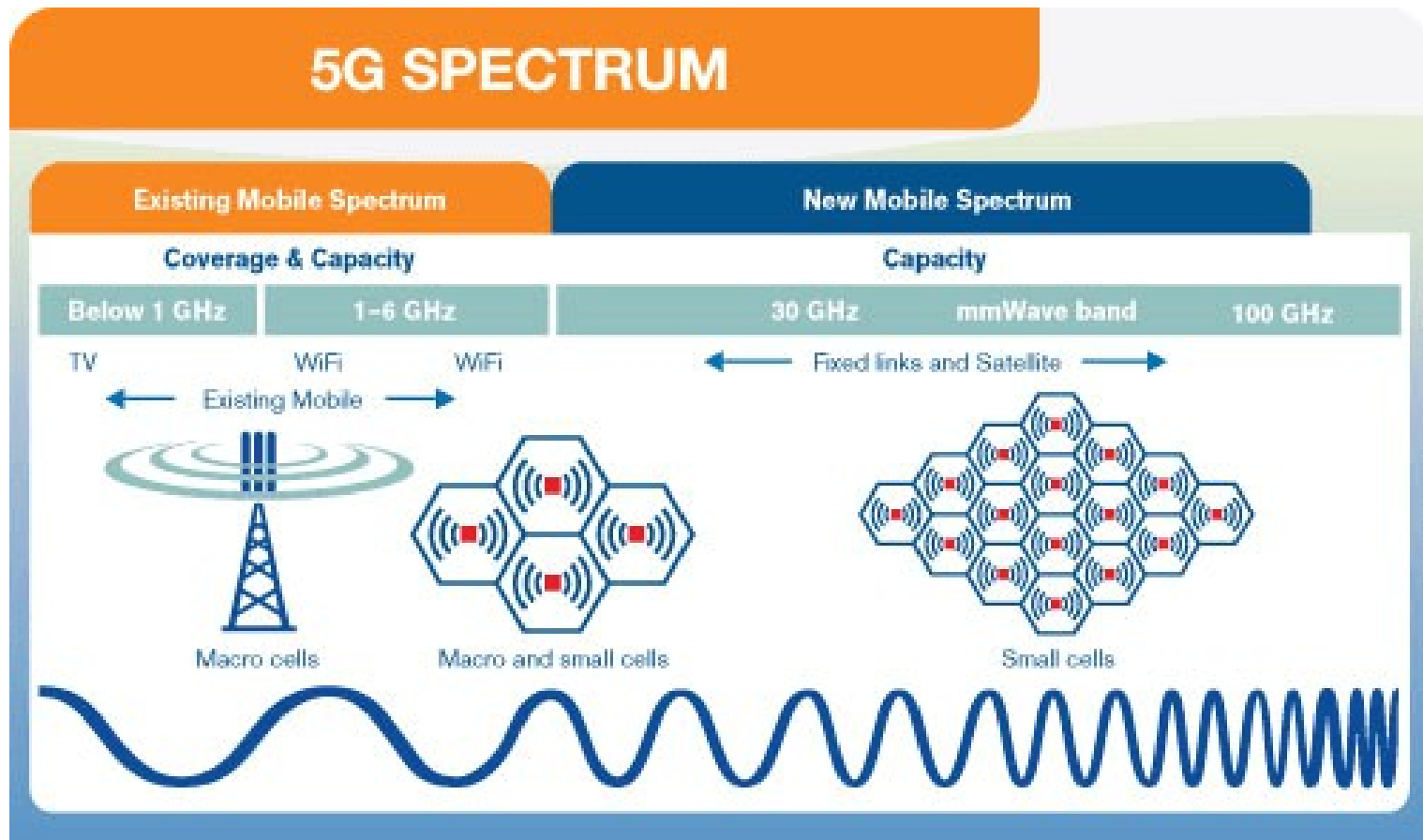
- EMR = Electro Magnetic Radiation
- EMF = Electro Magnetic Frequencies
- RFR = Radio Frequency Radiation
- GHz = Gigahertz = 1 billion hertz  
(hertz is a unit of measure: 1 hertz = 1 cycle per second)

# 5G – Makes way for The Internet of Things (IoT)



# 5G – What it is

4G frequencies are below 6 GHz whereas 5G frequencies are between 30 GHz to 100 GHz



# 5G – What it is



Millions of 5G antennas inside and outside of buildings every 200 meters apart.

This will result in  
*“millions more radiofrequency transmitters around us”* (The Lancet).

***Without our consent, we will all be subjected to this radiation 24/7.***

# 5G – Health Concerns



SCIENTIFIC  
AMERICAN **175**



*Observations | Opinion*

By Joel M. Moskowitz on October 17, 2019

## We Have No Reason to Believe 5G Is Safe

“...over 500 peer-reviewed studies have found harmful biological or health effects from exposure to RFR at *intensities too low to cause significant heating.*”

By: Joel M. Moskowitz, PhD, is director of the Center for Family and Community Health in the School of Public Health at the University of California, Berkeley.

•<https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/>

# 5G – Health Concerns

## The Lancet Planetary Health:

“Mounting Scientific Evidence suggests that prolonged exposure to radio frequency electromagnetic radiation has serious biological and health effects”

[https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196\(18\)30221-3.pdf](https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196(18)30221-3.pdf)



# 5G – Health Concerns

'More than 10,000 peer-reviewed scientific studies demonstrated harm to human health from RF radiation

**[10] [11] Effects include:**

**Alteration of heart rhythm[12]**

**Altered gene expression[13]**

**Altered metabolism[14]**

**Altered stem cell development[15]**

**Cancers[16]**

**Cardiovascular disease[17]**

**Cognitive impairment[18]**

**DNA damage[19]**

**Impacts on general well-being[20]**

**Increased free radicals[21]**

**Learning and memory deficits[22]**

**Impaired sperm function and quality[23]**

**Miscarriage[24]**

**Neurological damage[25]**

**Obesity and diabetes[26]**

**Oxidative stress[27] “**

# Unique Vulnerability of Children

[https://ntp.niehs.nih.gov/ntp/about\\_ntp/trpanel/2018/march/presentations/07scarato\\_508.pdf](https://ntp.niehs.nih.gov/ntp/about_ntp/trpanel/2018/march/presentations/07scarato_508.pdf)



## Children's Exposure

"Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children."

-American Academy of Pediatrics

Thinner skulls, Smaller heads,  
Different dielectric properties

\*Brains less myelinated and still developing.

*"The average RF radiation energy deposition for children exposed to mobile phone RF is two times higher in the brain and 10 times higher in the bone marrow of the skull compared with mobile phone use by adults."*

- International Agency for the Research on Cancer
- Monograph on RFR, IT'IS modeling, also Gandhi et al, 2012



# Who is concerned?

- 215 Scientists from 41 countries communicated their alarm to the United Nations and the World Health Organization stating that:

“numerous recent scientific publications have shown that EMF affects living organisms *at levels well below most international and national guidelines.*”





“Big Tech is pushing 5G”

“5G is not sustainable”

“5G is an energy hog”

“5G brings massive increases in energy use”

*5G will contribute to a warming earth*

# 5G – Who is Concerned?



**PHYSICIANS  
FOR  
SAFE  
TECHNOLOGY**

[HOME](#)

[ABOUT US](#) ▾

[SCIENTIFIC LITERATURE](#) ▾

[REVIEW OF TOPICS](#) ▾

[POLICIES, RESOLUTIONS, AND TESTIMONY](#) ▾

[LINKS & RESOURCES](#)

[CONTACT US](#)

[ALL BLOG NEWS AND EVENTS](#)

Many scientists who work in the field of EMR claim there is clear evidence of harm from long term low level exposure of non ionizing radiation that warrants an upgrade from “possible carcinogen” to a “known carcinogen”

# 5G – Who is Concerned?



**PHYSICIANS  
FOR  
SAFE  
TECHNOLOGY**

HOME

ABOUT US ▾

SCIENTIFIC LITERATURE ▾

REVIEW OF TOPICS ▾

POLICIES, RESOLUTIONS, AND TESTIMONY ▾

LINKS & RESOURCES

CONTACT US

ALL BLOG NEWS AND EVENTS

“These scientists are now warning that its predictable adverse effect will create “biological, environmental as well as societal disruption” and will “be difficult or impossible to reverse.”

<https://mdsafetech.org/problems/5g/>



- 188,097 signatories (scientists, doctors, others) from 203 nations signed the Emergency **International Appeal to stop 5G** on Earth and in Space.

Names are published here:: <https://www.davidmarinelli.net/blog/stop-5g-earth-space-harm-life/>

# 5G – Who would you Believe?

Googling “*Radiation dangers*” or “*5G dangers*” will result in hundreds more links to credible, well researched sources who have nothing personal to gain from their statements.

Googling “5G” alone will also result in hundreds of links promoting the benefits of 5G and denying any danger from companies associated with the deployment and maintenance of 5G for there are trillions of \$ to be made from this.



# The Precautionary Principle

The Precautionary Principle implies a social responsibility to protect the public from exposure when scientific evidence about an environmental or human health hazard is uncertain and the stakes are high...

***Isn't this the case with 5G?***

# 5G – What Vernon Can Do

- 1) Do what Geneva, Brussels, and hundreds of cities around the world have done: **use the Precautionary Principle** to protect citizens.
- 2) Place a **moratorium on installment of 5G** until council is sure it poses no environmental harm or health hazards as done by Mississauga, Ont.
- 3) Bring concerns about 5G to RDNO board and **ask for a full regional moratorium.**

# Brussels & Geneva ban 5G for Health reasons and call for Investigation of safety standards



*Brussels, Environment  
minister Céline Fremault*

“the people of Brussels are not guinea pigs whose health can be sold at a profit”



*Antonio Hodgers, head of  
Counsel of State Geneva*

“motivated by uncertainty on the potential health effects....announced a ban on the erection of further 5G mobile antennas

<https://buncranatogether.com/home/2019/5/9/both-brussels-and-geneva-ban-rollout-of-5g-for-health-reasons-and-call-for-investigation>

# Why We Must Act NOW

5G is insidious in the real sense of the word as  
its installation is gradual and subtle

and

it may not be possible to reverse harmful effects  
once installed.

# Thank You

We hope this is only the beginning of a dialogue that will result in educating the public, particularly the health and education sectors.